

**[0061]** The Black FFT Acetate product stored 4 wks at 60° C. had more roasty flavor and less acidic/sour flavor. Results are as follows for the milk products:

	Coffee Aroma	Roasty Aroma	Dairy Sour Flavor	Roasty Flavor	Coffee Flavor
REF = 2232.03 w FFT Acetate Milk 4 wks -40 C.	0	0	0	0	0
Sample 2 = 2232.02 Control Milk 4 wks 60 C.	-0.40	-0.48	0.13	-0.061	-0.58
Sample 3 = 2232.03 w FFT Acetate Milk 4 wks 60 C.	0.09	-0.09	0.11	-0.21	-0.18
Sample 4 = 2232.04 w Furfurylthiol Milk 4 wks 60 C.	-0.71	-1.23	0.65	-1.04	-1.04

less sour dairy flavor compared to the Control and Furfurylthiol products. We have observed less sour dairy flavor formation during storage using this same Milk FFT Acetate

**[0062]** The Milk FFT Acetate product stored 4 wks at 60° C. had more coffee aroma, more roasty aroma, more roasty flavor, more coffee flavor and was lowest in dairy sour flavor.

#### Chemical Analysis

**[0063]** A standard laboratory method was used to evaluate the previous samples throughout storage for pH. pH results are as follows for the black products:

	Before retort	After retort	2 wk (-40 C.)	2 wk 38 C.	2 wk 60 C.	4 wk (-40 C.)	4 wk 38 C.	4 wk 60 C.
2237.01 Control Black	6.82	6.12		6.22	6.13		6.20	6.10
2237.02 w FFT Acetate Black	6.80	6.11	6.25	6.23	6.16	6.32	6.41	6.28
2237.03 w Furfurylthiol Black	6.81	6.13		6.24	6.18		6.20	6.08

**[0064]** The Black FFT Acetate product had a pH of 0.18 and 0.20 units higher after 4 wks storage at 60° C. compared to the Control and Furfurylthiol products, respectively. Acidity formation in RTD coffee is a well known problem and affects the sensory quality of the product during storage. The addition of FFT Acetate offers a way to prevent acid formation and improve the RTD coffee flavor. pH results are as follows for the milk products:

	Before retort	After retort	2 wk (-40 C.)	2 wk 38 C.	2 wk 60 C.	4 wk (-40 C.)	4 wk 38 C.	4 wk 60 C.
2232.02 Control Milk	6.85	6.31		6.36	6.32		6.25	6.10
2232.03 w FFT Acetate Milk	6.85	6.33	6.57	6.56	6.50	6.59	6.56	6.45
2232.04 w Furfurylthiol Milk	6.87	6.35		6.44	6.36		6.44	6.32

**[0065]** Surprisingly, the Milk FFT Acetate product maintained a higher pH throughout storage. It was 0.35 and 0.13 units higher than the Control and Furfurylthiol products, respectively, after 4 wks storage at 60° C. This higher pH value would explain why the FFT Acetate stored product had

formula when tasted side by side with an untreated Control in a previous study that was stored at 38° C. for 6 months.

**[0066]** Two chemical compounds were monitored in these products during storage using a calibrated Isotope Dilution Headspace SPME method and labeled standards. These were furfurylthiol and furfurylthioacetate (see FIGS. 1A-H).

1. A thermally processed and stored ready to drink liquid coffee product comprising a coffee, a stabilizer, a buffer,

water and a thioester flavor precursor in an amount sufficient to provide improved flavor quality to the product after thermal processing and storage of the liquid product for more than 4 months at ambient temperature and for more than 1 month at 60° C. storage.

2. The product of claim 1, wherein the thioester flavor precursor is of the structure R—S—CO—R', wherein R is selected from the group consisting of methyl, ethyl, propyl,

isopropyl, prenyl, and furfuryl, and R' is selected from the group consisting of H, methyl, ethyl, propyl, and isopropyl.

3. The product of claim 1, wherein the concentration of the thioester flavor precursor is between about 0.005 to 7 mg/kg.

4. The product of claim 1, wherein the thioester flavor precursor is selected from the group consisting of furfuryl-